

### **IN THE CLAIMS**

The following is a complete listing of claims with a status identifier in parenthesis.

#### **LISTING OF CLAIMS**

1. (Currently Amended) A method for setting varying a number of base stations that can be considered hand-off base stations ~~hand-off base station list~~ comprising the steps of:

measuring real-time traffic flow criteria associated with one or more base stations, ~~the stations included in an adaptable neighbor list of potential hand-off base stations;~~

setting varying a size number of base stations that can be considered hand-off base stations, of the from a neighbor list of potential hand-off base stations, depending on the measured traffic flow criteria ; ~~and~~

~~enabling or preventing a hand-off between a wireless device and at least one of the base stations on the varied list based on the measured traffic flow criteria.~~

2. (Currently Amended) The method as in claim 1 further comprising the step of setting varying the number of base stations size of the neighbor list so that the number size is set below an initial number size to prevent ~~a return to~~ an overload traffic condition.

3. (Original) The method as in claim 1 further comprising the step of maintaining an initial neighbor list and generating an adaptable neighbor list of potential hand-off base stations based on traffic flows.

4. (Currently Amended) The method as in claim 1 further comprising setting ~~varying~~ the number of base stations ~~size of the adaptable neighbor list~~ without requiring human intervention.

5. (Currently Amended) The method as in claim 1 further comprising decreasing the number of base stations ~~size of the adaptable neighbor list~~ as the traffic flow criteria worsens.

6. (Currently Amended) The method as in claim 1 further comprising increasing the number of base stations ~~size of the adaptable neighbor list~~ as traffic flow criteria improves.

7. (Currently Amended) The method as in claim 1 wherein the number of base stations included in the ~~adaptable~~ neighbor list of potential hand-off base stations is less than a maximum number of base stations included in an initial neighbor list.

8. (Currently Amended) The method as in claim 1 further comprising the step of forwarding the ~~varied~~, adaptable neighbor list to a ~~the~~ wireless device.

9. (Currently Amended) The method as in claim 1 wherein a ~~the~~ wireless device is operable to enable a ~~the~~ hand-off.

10. (Currently Amended) The method as in claim 1 wherein the at least one base station on the ~~varied~~ list is operable to enable a ~~the~~ hand-off.

11. (Currently Amended) A method for ~~setting~~ varying a number of base stations that can be considered hand-off base stations ~~hand-off base station list~~ comprising the steps of:

measuring real-time traffic flow criteria of a base station on the list;

comparing the measured flow criteria to a threshold; and

setting a number of base stations that can be considered hand-off base stations ~~neighbor list size~~ associated with the threshold based on the results of the comparison.

12. (Currently Amended) The method as in claim 11 further comprising the steps of:

comparing the measured traffic flow criteria to a plurality of thresholds; and

setting the number of base stations ~~size of the list~~ to a number ~~size~~ associated with a last threshold of the plurality of thresholds exceeded by the measured traffic flow criteria.

13. (Original) The method as in claim 11 wherein a value of the threshold may change over time.

14. (Original) The method as in claim 12 wherein the number of thresholds may change over time.

15. (Currently Amended) The method as in claim 11 wherein the number of base stations ~~size~~ associated with the threshold may change over time.

16. (Original) A method for controlling hand-offs in a base station, comprising the steps of:

measuring, in real-time, traffic flow criteria related to a wireless network; and

controlling the length of a neighboring base station list as a function of the value of the traffic flow criteria.

17. (Original) A method for use in a wireless network comprising the step of enabling a base station currently serving a call for a wireless device to hand-off said call to another base station on its neighboring base station list only when a real-time measurement of a traffic flow criteria meets an acceptable level.

18. (Original) The method as in claim 17 further comprising the step of preventing said base station from handing-off said call when said traffic flow criteria does not meet said acceptable level.

19. (Original) A method for use in a wireless network comprising the step of enabling a first base station to hand-off a call being served by said first base station to a second base station on said first base station's neighboring base station list only when a real-time measurement of traffic flow criteria indicates that said second base station can serve said call, whereby said call is not dropped by said second base station substantially immediately after said hand-off.

20. (Currently Amended) A system for setting ~~varying~~ a hand-off base station list operable to:

measure real-time traffic flow criteria associated with one or more base stations, ~~the stations included in an adaptable neighbor list of potential hand-off base stations;~~

~~set vary a size number of base stations that can be considered hand-off base stations, of the from a neighbor list of potential hand-off base stations,~~ depending on the measured traffic flow criteria; and

~~enable or prevent a hand-off between a wireless device and at least one of the base stations on the varied list based on the measured traffic flow criteria.~~

21. (Currently Amended) The system as in claim 20 comprising a control section operable to ~~set vary~~ the number of base stations ~~size of the neighbor list~~ so that the number size is set below an initial number size to prevent a ~~return to~~ an overload traffic condition.

22. (Original) The system as in claim 20 comprising a control section operable to maintain an initial neighbor list and generate an adaptable neighbor list of potential hand-off base stations based on traffic flow criteria.

23. (Currently Amended) The system as in claim 20 comprising a control section operable to ~~set vary~~ the number of base stations ~~size of the adaptable neighbor list~~ without requiring human intervention.

24. (Currently Amended) The system as in claim 20 comprising a control section operable to decrease the number of base stations ~~size of the adaptable neighbor list~~ as the traffic criteria worsen.

25. (Currently Amended) The system as in claim 20 comprising a control section operable to increase the number of base stations ~~size of the adaptable neighbor list~~ as the traffic flow criteria improves.

26. (Currently Amended) The system as in claim 20 wherein the number of base stations included in the ~~adaptable~~ neighbor list of potential hand-off base stations is less than a maximum number of base stations included in an initial neighbor list.

27. (Currently Amended) The system as in claim 20 comprising a control section operable to forward the ~~varied~~, adaptable neighbor list to a the wireless device.

28. (Currently Amended) A system for setting ~~varying~~ a number of base stations that can be considered hand-off base stations ~~hand-off base station list~~ operable to:

measure real-time traffic flow criteria of a base station on the list;

compare the measured flow criteria to a threshold; and

set a number of base stations that can be considered hand-off base stations ~~neighbor list~~ ~~size~~ associated with the threshold based on the results of the comparison.

29. (Currently Amended) The system as in claim 28 further operable to:

compare the measured traffic flow criteria to a plurality of thresholds; and

set the number of base stations ~~size of the list~~ to a number ~~size~~ associated with a last threshold of the plurality of thresholds exceeded by the measured traffic flow criteria.

30. (Original) The system as in claim 28 wherein a value of the threshold may change over time.

31. (Original) The system as in claim 29 wherein the number of thresholds may change over time.

32. (Currently Amended) The system as in claim 28 wherein the set number of base stations from the neighbor list ~~neighbor list size~~ associated with the threshold may change over time.

33. (Original) A system for controlling hand-offs in a base station, operable to:  
measure, in real-time, traffic flow criteria related to a wireless network; and  
control the length of a neighboring base station list as a function of the value of the traffic flow criteria.

34. (Original) A system for use in a wireless network operable to enable a base station currently serving a call for a wireless device to hand-off said call to another base station on its neighboring base station list only when a real-time measurement of traffic flow criteria meets an acceptable level.

35. (Original) The system as in claim 34 further operable to prevent said base station from handing-off said call when said traffic flow criteria does not meet said acceptable level.

36. (Original) A system for use in a wireless network operable to enable a first base station to hand-off a call being served by said first base station to a second base station on said first base station's neighboring base station list only when a real-time measurement of traffic flow criteria indicates that said second base station can serve said call, whereby said call is not dropped by said second base station substantially immediately after said hand-off.

37. (Currently Amended) A system for setting varying a hand-off base station list comprising:

means for measuring real-time traffic flow criteria associated with one or more base stations, ~~the stations included in an adaptable neighbor list of potential hand-off base stations;~~

means for setting varying a number of base stations that can be considered hand-off base stations, of the from a neighbor list of potential hand-off base stations, depending on the measured traffic flow criteria; and

~~means for enabling or preventing a hand-off between a wireless device and at least one of the base stations on the varied list based on the measured traffic flow criteria.~~

38. (Currently Amended) The system as in claim 37 comprising a control section having means for setting varying the number of base stations ~~size of the neighbor list~~ so that the number size is set below an initial number size to prevent a ~~return to~~ an overload traffic condition.

39. (Currently Amended) The system as in claim 37 comprising a control section having means for decreasing the number of base stations ~~size of the adaptable neighbor list~~ as the traffic criteria worsen.



40. (Currently Amended) The system as in claim 37 comprising a control section comprising means for increasing the number of base stations ~~size of the adaptable neighbor list~~ as the traffic flow criteria improves.

41. (Currently Amended) A system for ~~setting~~ ~~varying~~ a number of base stations that can be considered hand-off base stations ~~hand-off base station list~~ comprising:

means for measuring real-time traffic flow criteria of a base station on the list;

means for comparing the measured flow criteria to a threshold; and

means for setting a number of base stations that can be considered hand-off base stations ~~neighbor list size~~ associated with the threshold based on the results of the comparison.

42. (Currently Amended) The system as in claim 41 comprising: means for comparing the measured traffic flow criteria to a plurality of thresholds; and means for setting the number of base stations ~~size of the list~~ to a number ~~size~~ associated with a last threshold of the plurality of thresholds exceeded by the measured traffic flow criteria.

43. (Original) A system for controlling hand-offs in a base station, comprising:  
means for measuring, in real-time, traffic flow criteria related to a wireless network; and  
means for controlling the length of a neighboring base station list as a function of the value of the traffic flow criteria.

44. (Original) A system for use in a wireless network comprising means for enabling a base station currently serving a call for a wireless device to hand-off said call to another base station on its neighboring base station list only when a real-time measurement of traffic flow criteria meets an acceptable level.

45. (Original) The system as in claim 44 comprising means for preventing said base station from handing-off said call when said traffic flow criteria does not meet said acceptable level.

46. (Original) A system for use in a wireless network comprising means for enabling a first base station to hand-off a call being served by said first base station to a second base station on said first base station's neighboring base station list only when real-time measurement of traffic flow criteria indicates that said second base station can serve said call, whereby said call is not dropped by said second base station substantially immediately after said hand-off.

47. (Currently Amended) The ~~A method as in claim 1 wherein the measurement step further for varying a hand-off base station list~~ comprises comprising:

measuring the level of one or more pilot signals, each pilot signal associated with a potential hand-off base station included in ~~an adaptable~~ the neighbor list ~~of potential hand-off base stations that has been sized to prevent a return to an overload traffic condition;~~

~~enabling a hand-off between the wireless device and at least one base station on the list when the at least one base station is associated with an acceptable pilot signal level; and~~

~~preventing a hand-off between the wireless device and at least one base station when the at least one base station is associated with an unacceptable pilot signal or will result in a return to an overload traffic condition.~~

48. (Currently Amended) The A system as in claim 20 further ~~for varying a hand-off base station list operable to:~~

~~measure the level of one or more pilot signals, each pilot signal associated with a potential hand-off base station included in the an adaptable neighbor list of potential hand-off base stations that has been sized to prevent return to an overload traffic condition;~~

~~enable a hand-off between the wireless device and at least one base station on the list when the at least one base station is associated with an acceptable pilot signal level; and~~

~~prevent a hand-off between the wireless device and at least one base station when the at least one base station is associated with an unacceptable pilot signal or will result in a return to an overload traffic condition.~~

49. (Currently Amended) The A system as in claim 37 ~~for varying a hand-off base station list further~~ comprising:

~~means for measuring the level of one or more pilot signals, each pilot signal associated with a potential hand-off base station included in an adaptable neighbor list of potential hand-off base stations that has been sized to prevent return to an overload traffic condition;~~

~~means for enabling a hand-off between the wireless device and at least one base station on the list when the at least one base station is associated with an acceptable pilot signal level;~~  
~~and~~